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(54) **Circuit element having capacitor and field effect transistor comprising nanowires**

(57) In a circuit device having a field effect transistor and a capacitor, the capacitor is connected to at least one of a gate electrode (24), a source electrode (21) and a drain electrode (22) of a field effect transistor, the field effect transistor has a channel comprised of a first nano-wire (20), and the capacitor comprises a first electrode

(8) comprised of a second nano-wire having electroconductivity, a dielectric layer (9) partly covering the peripheral face of the first electrode (8) and a second electrode (10) covering the peripheral face of the dielectric layer (9). The circuit device is used in DRAMs, TFTs, and displays.

FIG. 3A

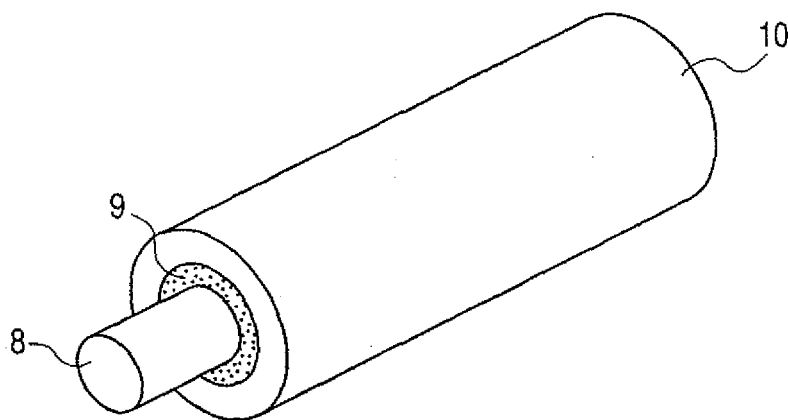
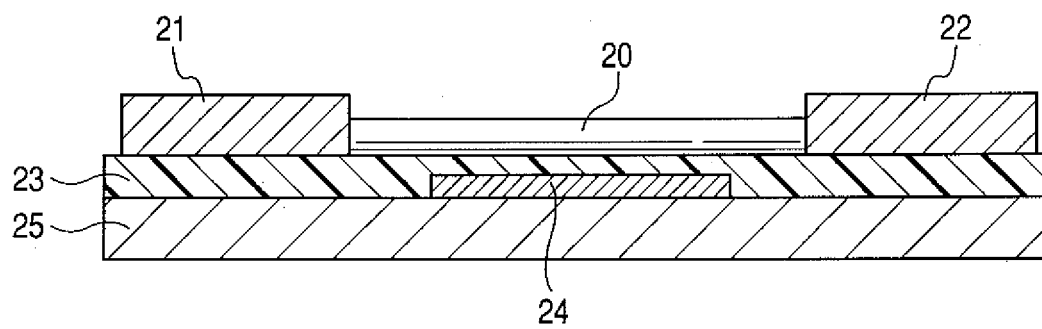


FIG. 11





EUROPEAN SEARCH REPORT

Application Number
EP 06 12 3391

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) H01L
Place of search Munich		Date of completion of the search 26 April 2010	Examiner Neumann, Andreas
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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